Urban Streets Roadway Criteria For Posted Speed Limits Of 40 mph Or Less

Functional Class	Design Year ADT Thresholds at Levels of Service (LOS) C, D & E Based on Typical Worst Case and Best Case Scenarios [1]				Design Basis		Roadway Criteria							
							Travel Lanes		Median Widths (Meters)	Roadway (Face of Curb to Face Of Curb) Width (meters) [4]				
										No Parking [6,7]		Parking [6,7]		
		C LOS Trigger 4.0 ADT (DHV)	D LOS Trigger 5.0 ADT (DHV)	Middle E LOS Trigger 5.5 ADT (DHV)	CLASS	Design Speed (Km/h) [3]	NUMBER	Lane Width (Meters) [5]		Range of Normal Widths	Range of Widths w/ Bike Provisions	Range of Normal Widths	Range of Widths w/ Bike Provisions
Locals	N/A	Low Volume Residential (0-250 ADT)			1a	**30-40**	1	**3.6**	No	**N/A**	**N/A**	**7.8**	**7.8**
		Volume not a consideration			1b	**40-50**	2	**3.0-3.6** (2.7)	No	**8.4-9.0** (6.0)	**9.0-10.8** (8.4)	**10.2-12.0** (9.0)	**13.8-16.8** (9.0)
Arterials And Collectors	N/A	≤ 4,500 ADT (660 DHV)			2a	**50-70**	2	**3.3-3.6** (3.0)	No	**9.6-10.8** (6.6)	**9.6-10.8** (9.0)	**14.4-15.6** (10.2)	**14.4-17.4** (14.4)
	Worst Best	8,000[2] (985) 20,000 (2100)	9,000 [2] (1080) 22,500 (2340)	9,500 [2] (1120) 24,500 (2540)	2b	**50-70**	2	**3.3-3.6** (3.0)	No	**10.8** (6.6)	**10.8** (9.0)	**14.4-15.0** (10.2)	**14.4-16.8** (14.4)
	Worst Best	16,000[2] (1730) 36,000 (3600)	16,500 (1780) 40,000 (3960)	17,000 (1820) 43,000 (4200)	3	**50-70**	4	**3.3-3.6** (3.0)	No	**16.2-18.0** (12.6)	**16.2-18.0** (15.0)	**21.0-22.2** (16.2)	**21.0-24.0** (20.4)
	Worst Best	18,000[2] (1910) 37,500 (3710)	24,000 (2470) 41,000 (4060)	24,500 (2520) 44,000 (4300)	4	**50-70**	4	**3.3-3.6** (3.0)	**4.2-9.0** (1.8)	2 @ **8.7-9.6** (2 @ 6.6)	**2 @ 8.7-9.6** (2 @ 7.8)	**2 @ 10.8-11.7** (2 @ 8.4)	**2 @ 10.5-12.6** (2 @ 10.2)
Arterials	Worst Best	30,000 [2] (3030) 57,500 (5575)	38,000 (3760) 63,000 (6110)	38,500 (3810) 67,000 (6460)	5	**50-70**	6	**3.3-3.6** (3.0)	**4.2-9.0** (1.8)	2 @ **11.7-13.2** (2 @ 9.6)	**2 @ 11.7-13.2** (2 @ 10.8)	**2 @ 14.1-15.3** (2 @ 11.4)	**2 @ 14.1-16.2** (2 @ 13.5)

Desirable values are shown in bold and minimum values are shown in parentheses.

[1] ADT thresholds represent typical Worst Case and Best Case scenarios for LOS C, D & middle E. These volumes are based on the 2000 Highway Capacity Manual using the assumptions shown in Figure 4. If the project ADT is below the Worst Case ADT threshold, then the highway will most likely operate sufficiently under its current configuration. If the project ADT is above the Best Case ADT threshold, then additional lanes or other improvements are most likely needed. If the project ADT falls between the Worst Case and the Best Case thresholds, then a Highway Capacity Manual analysis or some other traffic analysis will need to be completed to evaluate the projects capacity, LOS and possible incremental improvements. See FDM 11-5-3 for further guidance on acceptable LOS for corridors 2020 Routes, Non-corridors 2020 rural roadways, roadways in small urban areas (Pop ≤50,000) and roadways in Urbanized areas (Pop.>50,000).

[2] LOS C is not obtainable when the traffic signal density is greater then approximately 3 signals/km.

[3] Desirable Design Speed is approximately 8 Km/h greater than the posted speed. A minimum design speed equal to the posted speed limit is acceptable.

[4] Based on 0.6m gutter widths. 0.3gutter widths may be used when appropriate

[5] Gutter width not included . Designated Long Truck routes shall contain at least one 3.6m lane in each direction. Lane widths for NHS Routes and Arterials and Collectors, not designated as long truck routes, with high truck and bus volumes (³5%) should be 3.6m and a minimum of 3.3 m when truck and bus volumes are equal to or greater than 2.5%.

[6] Two lane Connecting Highways and STH's should desirably have a curb to curb width of 10.8 m when no provision for parking is to be made. Designs that use parking lanes are discouraged

[7] Bike provisions should be provided on all arterial and collector streets whenever possible. Justification in the DSR for the use of minimum standards should include documentation on why bike provisions are not possible or feasible to provide. See FDM 11-45-10 for further guidance.

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